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CLAIMS

1. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

light entering the anisotropic scattering layer is scattered over a wider angle along the Y-axis direction than along the X-axis direction.

2. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the

anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go
5 transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance is substantially the same in value for both the X-axis direction and the Y-axis direction.
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3. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted
15 orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which
20 the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at
25 right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to
30 the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and
35 maximum straight-go transmittance differs in value between the X-axis direction and the Y-axis direction.

4. A liquid crystal display comprising a first

substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is asymmetrical along the X-axis direction about a layer normal to the anisotropic scattering layer and symmetrical along the Y-axis direction.

5. A liquid crystal display as claimed in claim 3 or 4, wherein the straight-go transmittance of the anisotropic scattering layer in oblique directions has a characteristic such that the maximum straight-go transmittance is higher for light rays obliquely incident along the X-axis direction than for light rays obliquely incident along the Y-axis direction.

6. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a scattering layer is provided in addition to the anisotropic scattering layer.

7. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the nematic liquid crystal material has a twist angle that lies within a range of 180° to 260°.

8. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the reflective layer is formed

as a transflective layer, and a backlight is provided on the outside of the first substrate.

5 9. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a color filter consisting of a plurality of colors is provided on either one of the first and second substrates.

10 10. A liquid crystal display as claimed in any one of claims 1 to 4, wherein at least one optical compensating element is provided on the second substrate side, and the optical compensating element is constructed using a retardation film or a twisted retardation film or both.

Article 19 Amendment

1. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

light entering the anisotropic scattering layer is scattered over a wider angle along the Y-axis direction than along the X-axis direction.

2. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the

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anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance is substantially the same in value for both the X-axis direction and the Y-axis direction.

3. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance differs in value between the X-axis direction and the Y-axis direction.

4. (Amended) A liquid crystal display comprising a

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first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is asymmetrical along the X-axis direction about a layer normal to the anisotropic scattering layer and symmetrical along the Y-axis direction, and the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction.

5. A liquid crystal display as claimed in claim 3 or 4, wherein the straight-go transmittance of the anisotropic scattering layer in oblique directions has a characteristic such that the maximum straight-go transmittance is higher for light rays obliquely incident along the X-axis direction than for light rays obliquely incident along the Y-axis direction.

6. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a scattering layer is provided in addition to the anisotropic scattering layer.

7. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the nematic liquid crystal material has a twist angle that lies within a range of

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

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STATEMENT UNDER ARTICLE 19(1)

5 A feature stating "the straight-go transmittance of
the anisotropic scattering layer in the direction of said
layer normal is lower than the straight-go transmittance
thereof in any oblique direction" has been added to claim
4. This clarifies the difference from the cited
reference (JP. 11-119215).

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